

CLAIMS

We claim:

1. A motor core movable relative to a stator; the motor core comprising a base member and a plurality of adjacent tooth members, each tooth member comprising:
 - a tooth surface;
 - tooth sides extending from said tooth surface toward said base member;
 - at least one of said tooth sides comprising a tip portion and a base portion said tip portion extending from said tooth surface to said base portion;
 - said base portion extending from said tip portion to an adjoining base portion of a tooth side of an adjacent tooth member;
 - wherein said tip portion is curved.
2. The motor core of claim 1 wherein said tip portion is curved concavely in relation to a transverse axis of said tooth..
3. The motor core of claim 1 wherein said tip portion has a substantially constant curvature.
4. The motor core of claim 1 wherein said tip portion and said base portion are substantially curved.
5. The motor core of claim 1 wherein said tip portion is curved and said base portion is substantially straight.
6. The motor core of claim 1 wherein the area of said tip portion is greater than or equal to the area of said base portion.

7. The motor core of claim 1 wherein the area of said tip portion is less than or equal to the area of said base portion.
8. The motor core of claim 1 wherein said motor core comprises a plurality of stacked laminations, each lamination comprising:
 - a tooth surface;
 - tooth sides extending between adjacent tooth surfaces;
 - said tooth sides comprising at least a tip portion extending from said tooth surface, and a base portion extending from said tip portion to a base portion of an adjacent tooth side.
9. The motor core of claim 1 wherein said tooth surface receives magnetic flux during the operation of the motor.
10. The motor core of claim 1 further including a stator, said stator comprising a plurality of stator teeth.
11. A motor core movable relative to a stator; the stator comprising a base member and a plurality of adjacent tooth members, each tooth member comprising:
 - a tooth surface;
 - tooth sides extending from said tooth surface toward said base member;
 - at least one of said tooth sides comprising a tip portion and a base portion said tip portion extending from said tooth surface to said base portion;

said base portion extending from said tip portion to an adjoining
base portion of a tooth side of an adjacent tooth member;
wherein said tip portion is curved.

12. The stator of claim 11 wherein said tip portion is curved concavely in relation to a transverse axis of said tooth..
13. The stator of claim 11 wherein said tip portion has a substantially constant curvature.
14. The stator of claim 11 wherein said tip portion and said base portion are substantially curved.
15. The stator of claim 11 wherein said tip portion is curved and said base portion is substantially straight.
16. The stator of claim 11 wherein the area of said tip portion is greater than or equal to the area of said base portion.
17. The stator of claim 11 wherein the area of said tip portion is less than or equal to the area of said base portion.
18. The stator of claim 11 wherein said stator comprises a plurality of stacked laminations, each lamination comprising:

a tooth surface;

tooth sides extending between adjacent tooth surfaces;

said tooth sides comprising at least a tip portion extending from said
tooth surface, and a base portion extending from said tip portion to a base portion of an
adjacent tooth side.

19. The stator of claim 11 wherein said tooth surface receives magnetic flux during the operation of the motor.
20. The stator of claim 11 further including a stator, said stator comprising a plurality of stator teeth.